

**Notice of Allowability**

Application No.

09/893,805

Examiner

Andrew C. Lee

Applicant(s)

GRUNKEMEYER ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 7/16/2007.
2. ☒ The allowed claim(s) is/are 1,7-14,16,18,24-29 renumbered 1- 17, respectively.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date 1/19/2007
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

## **DETAILED ACTION**

### **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Ms Bhavani S. Rayaprolu on 7/26/2007.

The application has been amended as follows:

- Claim 30 was canceled.

### ***Allowable Subject Matter***

2. Claims 1, 7 – 14, 16, 18, 24 – 29 are allowed.

## **REASONS FOR ALLOWANCE**

3. The following is an examiner's statement of reasons for allowance:

The prior art made of record, in single or in combination, does not disclose explicitly the limitation of:

"where the one or more constituent parts comprise at least one of: a begin asynchronous operation method; an end asynchronous operation method; an asynchronous call state object; and an asynchronous call result object,

where the begin asynchronous operation method returns an asynchronous result object and accepts as inputs at least one of: input parameters presented to the target method; input/output parameters presented to the target method; parameters passed by reference to the target method; an address of an asynchronous callback routine; and the asynchronous call state object,

where the end asynchronous operation method accepts as inputs at least one of: input/output parameters presented to the target method; output parameters presented to the target method; parameters passed by reference to the target method; and the asynchronous call result object, and

where the asynchronous call result object comprises: a first field that holds information concerning whether the begin asynchronous operation method completed asynchronously; and a second field that holds information concerning whether a server completed processing the target method.” as disclosed claim 1.

“where the asynchronous call result object comprises: a first field that holds information concerning whether the begin asynchronous operation method completed asynchronously; and a second field that holds information concerning whether a server completed processing the target method;

an asynchronous call initializer that accepts input parameters from the client caller and forwards the input parameters towards the target method, the asynchronous call initializer further establishes a callback routine, where the callback routine can be invoked upon

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completion of the target method, the asynchronous call initializer further a state object and populates one or more fields in the state object with state values associated with the asynchronous call, the asynchronous call initializer further returns a result object to the client caller;

an asynchronous call completer that accepts results generated by the target method and supplies the results to the client caller, the asynchronous call completer further updates the state object, the asynchronous call completer further updates the result object; and

a state tracker, that tracks and logs state related to processing associated with the asynchronous call initializer, the asynchronous call completer and the target method, the state tracker further updates the state object” as disclosed in claim 16.

“creating an asynchronous call result object to store results associated with the asynchronous method call;

creating an asynchronous call state object to store state information associated with the asynchronous method call;

where the constituent parts comprise at least one of:

a begin operation that will not block due to asynchronous method calling; and

an end operation that will not block due to asynchronous method calling;

where the end operation is invoked by one of:

processing associated with polling a field in the asynchronous call state object;

processing associated with waiting on the asynchronous call result object;

the begin operation; and

an asynchronous callback routine;

where code for synchronous method calls is associated with at least one of file input/output, stream input/output, socket input/output, networking, remoting channels, proxies, web forms, web services and messaging message queues can be converted; and where the asynchronous call result object comprises: a first field that holds information concerning whether the begin asynchronous operation completed asynchronously; and a second field that holds information concerning whether a server completed processing the target method." as disclosed in claim 18.

"where a begin asynchronous operation method returns an asynchronous result object and accepts as inputs at least one of: input parameters presented to the target method; input/output parameters presented to the target method; parameters passed by reference to the target method; an address of an asynchronous callback routine; and an asynchronous call state object,

where the end asynchronous operation method accepts as inputs at least one of: input/output parameters presented to the target method; output parameters presented to the target method; parameters passed by reference to the target method; and the asynchronous call result object, and

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where the asynchronous call result object comprises: a first field that holds information concerning whether the begin asynchronous operation method completed asynchronously; and a second field that holds information concerning whether a server completed processing the target method." as disclosed in claim 24.

" where the constituent parts comprise at least one of:

a begin operation that will not block due to the asynchronous call; and

an end operation that will not block due to the asynchronous calling call;

where the begin operation returns the result object and accepts as inputs at least one of:

input parameters presented to the target method; input/output parameters presented to the target method; parameters passed by reference to the target method; t-he an address of an asynchronous callback routine; and the asynchronous call state object,

where the end operation accepts as inputs at least one of: input/output parameters presented to the target method; output parameters presented to the target method;

parameters passed by reference to the target method; and the asynchronous call result object, and

where the result object comprises: a first field that holds information concerning whether the begin operation completed asynchronously; and a second field that holds information concerning whether a server completed processing the target method." as disclosed in claim 25.

"where the constituent parts comprise at least one of:

a begin operation that will not block due to an asynchronous method calling; and an end operation that will not block due to the asynchronous method calling; where the begin operation returns the result object and accepts as inputs at least one of: input parameters presented to the target method; input/output parameters presented to the target method; parameters passed by reference to the target method; an address of an asynchronous callback routine; and an asynchronous call state object, where the end operation accepts as inputs at least one of: input/output parameters presented to the target method; output parameters presented to the target method; parameters passed by reference to the target method; and the an asynchronous call result object, and where the asynchronous call result object comprises: a first field that holds information concerning whether the begin operation completed asynchronously; and a second field that holds information concerning whether a server completed processing the target method." as disclosed claim 27.

"an asynchronous call to a target method; identifying a target method called by a synchronous method call; initializing a state tracking object; establishing a callback routine, where the callback routine will be invoked upon notification of the completion of the target method, and where the callback routine will invoke processing associated with ending the asynchronous call to the target method; queuing a call to the target method, where the call is queued in a thread pool; returning and storing control parameters and a result object to the calling client;

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invoking the callback routine upon receiving notification of the completion of the target method; performing processing associated with ending the asynchronous call to the target method; and returning and storing control parameters and a result object consistent with the result of the target method to the calling client upon completion of the processing associated with asynchronous call of to the target method.” as disclosed in claim 28.

“means for accepting instructions to call a target method synchronously;  
means for generating instructions to call the target method asynchronously;  
means for generating an object to store results generated in response to performing the instructions to call the target method asynchronously;  
means for generating an object to store state information associated with performing the instructions to call the target method asynchronously;  
means for identifying the target method called by the synchronous method call;  
means for storing parameters intended for the target method;  
means for invoking a callback routine when the target method completes; and  
means for returning and storing parameters from the target method.” as disclosed in claim 29.

4. Additionally, all of the further limitations in claims 7 – 14, 26 are allowable since the claims are dependent upon the independent claims 1 and 25, respectively.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany



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the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew C. Lee whose telephone number is (571) 272-3131. The examiner can normally be reached on Monday through Friday from 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edan D. Orgad can be reached on (571) 272-7884. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Andrew C. Lee/::<7/29/2007>

EDAN ORGAD  
PRIMARY PATENT EXAMINER

*Edan Orgad* 8/6/07